



Docket No.: 1739-0183PUS1

Examiner: Not Yet Assigned

(PATENT)

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Klaus KRUCKENHAUSER et al.

Application No.: 10/580,275

Confirmation No.: N/A

Filed: May 25, 2006 Art Unit: N/A

For: VACUUM EXTRACTION UNIT FOR A

DEVICE USED TO STRUCTURE THE

SURFACE OF A WORKPIECE BY MEANS OF

**RADIATION** 

### **LETTER**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Subsequent to the filing of the above-identified application on May 25, 2006, attached hereto is an English Translation of the International Preliminary Report on Patentability issued by the International Bureau on behalf of the International Searching Authority. Please make this document of record for the above-identified application.

Application No.: 10/580,275 Docket No.: 1739-0183PUS1

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or to credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Dated: December 7, 2006

Respectfully submitted,

Paul C. Lewis

By

Registration No.: 43,368

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant

Attachment(s) PCT/1B/338 PCT/IPEA/409

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#### PATENT COOPERATION TREATY

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|---|----|----|---|--|
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NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)

(PCT Rules 44bis.3(c) and 72.2)

From the INTERNATIONAL BUREAU

То:

WAGNER, Bernhard, Peter Ter Meer, Steinmeister & Partner GbR Mauerkircherstrasse 45

81679 München ALLEMAGNE EINGEGANGEN TER MEER - STEINMEISTER & PARTNER

15. NOV. 2006

| Date of mailing (day/month/year) 09 November 2006 (09.11.2006) | Filet aumenment   |  |  |
|--|---|--|--|
| Applicant's or agent's file reference<br>STK 64 EP - Wa/ki     | IMPORTANT NOTIFICATION  |  |  |
| International application No. PCT/EP2004/004789                | International filing date (day/month/year) 05 May 2004 (05.05.2004) |  |  |
| Applicant STORK  | PRINTS AUSTRIA GMBH et al   |  |  |

| 1. 7 | <b>Fransmittal</b> | of the | translation | to | the applicant. |
|------|--------------------|--------|-------------|----|----------------|
|------|--------------------|--------|-------------|----|----------------|

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

KR

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume  $\Pi$  of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Yolaine Cussac

Facsimile No. +41 22 338 82 70

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## PATENT COOPERATION TREATY

# TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

| 1  | Applicant's or agent's file reference  FOR FURTHER ACTION  See Form PCT/IPEA/416  |  |   |  |  |  |
|--|---|--|---|--|--|--|
| STK 64 EP - Wa/ki  |   |  |   |  |  |  |
| 1  |   | International filing date (day/month/y                                       |   |  |  |  |
| 1  | PCT/EP2004/004789 05.05.2004 27.11.2003   |  |   |  |  |  |
|  | Patent Classification (IPC) or nat  | ional classification and IPC   |   |  |  |  |
| B41C1/   | 05, B23K26/14   |  |   |  |  |  |
| A  |   | · · · · · · · · · · · · · · · · · · ·  |   |  |  |  |
| Applicant  | DDING MICHDIA   | CMBH   |   |  |  |  |
| STORK  | PRINTS AUSTRIA  | GMBH   |   |  |  |  |
| L  |   |  |   |  |  |  |
| 1  |   | minary examination report, established ne applicant according to Article 36. | by this International Preliminary Examining Authority |  |  |  |
| 2. This  | REPORT consists of a total of   | 6 sheets   | . including this cover sheet.                         |  |  |  |
|  | report is also accompanied by A   |  |   |  |  |  |
| a.   |   | to the International Bureau) a total of                                      | 8 sheets, as follows:                                 |  |  |  |
| ļ  |   |  |   |  |  |  |
|  | sheets of the description. claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). |  |   |  |  |  |
|  | sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental                    |  |   |  |  |  |
|  | Box.  |  |   |  |  |  |
| b.   | (sent to the International  | Bureau only) a total of (indicate type a                                     | nd number of electronic carrier(s))                   |  |  |  |
|  | ·   | ·  | , containing a sequence listing and/or tables         |  |  |  |
|  | related thereto, in compute<br>Section 802 of the Adminis   | •  | he Supplemental Box Relating to Sequence Listing (see |  |  |  |
| 4. This  | report contains indications relat   | ing to the following items:  |   |  |  |  |
|  | Box No. I Basis of th   | e report   |   |  |  |  |
|  |   | · represent  |   |  |  |  |
|  | Box No. II Priority   |  |   |  |  |  |
|  | ı   | · · · · · · · · · · · · · · · · · · ·  | lty, inventive step and industrial applicability      |  |  |  |
|  | 1   | ity of invention   |   |  |  |  |
|  | Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement   |  |   |  |  |  |
|  | Box No. VI Certain documents cited  |  |   |  |  |  |
|  | Box No. VII Certain defects in the international application  |  |   |  |  |  |
| Box No. VIII Certain observations on the international application |   |  |   |  |  |  |
|  |   |  |   |  |  |  |
| Date of Subm   | Date of submission of the demand Date of completion of this report  |  |   |  |  |  |
| Name and   | Name and mailing address of the IPEA/EP Authorized officer  |  |   |  |  |  |
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#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/004789

| Box | No. I  | Basis of the report  |                                     |  |  |  |  |
|-----|--|--|-------------------------------------|--|--|--|--|
| 1.  |  | n regard to the language, this report is based on the internationated under this item. | onal application in the language in | which it was filed, unless otherwise                 |  |  |  |
|     | This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:  |  |                                     |  |  |  |  |
|     |  | international search (Rule 12.3 and 23.1(b))   |                                     |  |  |  |  |
|     |  | publication of the international application (Rule 12.4                                | ))                                  |  |  |  |  |
|     |  | international preliminary examination (Rule 55.2 and                                   | /or 55.3)                           |  |  |  |  |
| 2.  | 2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report): |  |                                     |  |  |  |  |
|     | $\boxtimes$  | the international application as originally filed/furnished the description:           |                                     |  |  |  |  |
|     | لاعا   | ·  |                                     |  |  |  |  |
|     |  | pages 3, 7–19  |                                     | as originally filed/furnished 26.08.2004 with letter |  |  |  |
|     |  | pages* 2   |                                     | of 26.08.2004<br>22.09.2005 with letter              |  |  |  |
|     |  | pages* 4, 4a, 5, 6   | received by this Authority on       | of 22.09.2005  |  |  |  |
|     | $\boxtimes$  | the claims:  |                                     | :  |  |  |  |
|     |  | nos.   |                                     | as originally filed/furnished                        |  |  |  |
|     |  | nos.*  | as amended (togethe                 |  |  |  |  |
|     |  | nos.* 1-22   | received by this Authority on       | 22.09.2005 with letter of 22.09.2005                 |  |  |  |
|     |  | nos.*  |                                     |  |  |  |  |
|     | $\boxtimes$  | the drawings:  | - , ,                               |  |  |  |  |
|     |  |  |                                     |  |  |  |  |
|     |  |  |                                     | as originally filed/furnished                        |  |  |  |
|     |  | sheets*  | _                                   |  |  |  |  |
|     |  | sheets*  | received by this Authority on       |  |  |  |  |
|     | Ш  | a sequence listing and/or any related table(s) - see Supplen                           | nental Box Relating to Sequence I   | Listing.   |  |  |  |
| 3.  | $\boxtimes$  | The amendments have resulted in the cancellation of:                                   |                                     |  |  |  |  |
|     |  | the description, pages   |                                     |  |  |  |  |
|     |  | the claims, nos. 23, 24  |                                     | ,  |  |  |  |
|     | the drawings, sheets/figs  |  |                                     |  |  |  |  |
| į   |  | the sequence listing (specify):  |                                     |  |  |  |  |
|     |  | any table(s) related to sequence listing (specify):                                    |                                     |  |  |  |  |
| 4.  |  | This report has been established as if (some of) the amen                              | deputs appeared to this separt ap   | d listed below had not have read air a               |  |  |  |
| 1   | <u> </u>   | they have been considered to go beyond the disclosure as f                             | iled, as indicated in the Suppleme  | ntal Box (Rule 70.2(c)).                             |  |  |  |
|     |  | the description, pages   |                                     |  |  |  |  |
|     |  | the claims, nos.   |                                     |  |  |  |  |
|     |  | the drawings, sheets/figs  |                                     |  |  |  |  |
|     | the sequence listing (specify):  |  |                                     |  |  |  |  |
|     |  | any table(s) related to sequence listing (specify):                                    |                                     |  |  |  |  |
| *   | If it  | em 4 applies, some or all of those sheets may be marked "suj                           | verseded."                          |  |  |  |  |

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International application No.

PCT/EP2004/004789

| Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |   |  |  |  |  |
|---|---|--|--|--|--|
| The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of: |   |  |  |  |  |
|   | the entire international application  |  |  |  |  |
| $\boxtimes$   | claims Nos. 2   |  |  |  |  |
| because   | <b>:</b>  |  |  |  |  |
|   | the said international application, or the said claims Nos.   |  |  |  |  |
|   | relate to the following subject matter which does not require an international preliminary examination (specify):   |  |  |  |  |
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|   |   |  |  |  |  |
| $\boxtimes$   | the description. claims or drawings (indicate particular elements below) or said claims Nos. 2  |  |  |  |  |
|   | are so unclear that no meaningful opinion could be formed (specify):  |  |  |  |  |
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|   | the claims, or said claims Nos are so inadequately supported by the description that no meaningful opinion could be formed.   |  |  |  |  |
|   | by the description that no meaningful opinion could be formed.  |  |  |  |  |
|   | no international search report has been established for said claims Nos.  |  |  |  |  |
|   | the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex $C$ of the Administrative Instructions in that:   |  |  |  |  |
|   | the written form has not been furnished   |  |  |  |  |
|   | does not comply with the standard   |  |  |  |  |
|   | the computer readable form has not been furnished   |  |  |  |  |
|   | does not comply with the standard   |  |  |  |  |
|   | ,   |  |  |  |  |
|   | the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions. |  |  |  |  |
|   | See Supplemental Box for further details.   |  |  |  |  |

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/004789

|    |           | citations and explanations supporting such statement |        |         | al applicability; |
|----|-----------|--|--------|---------|-------------------|
| 1. | Statement |  |        |         |                   |
|    | Novelty   | (N)  | Claims | 1, 3-22 | YES               |
|    |           |  | Claims |         | NO NO             |
|    | Inventive | e step (IS)  | Claims | 1, 3-22 | YES               |
|    |           |  | Claims |         | NO                |
|    | Industria | l applicability (IA)                                 | Claims | 1, 3-22 | YES               |
|    |           |  | Claims |         | NO NO             |
|    |           |  |        |         |                   |

- 2. Citations and explanations (Rule 70.7)
  - 1. Claim 1:
  - 1.1 Prior art:

D1 (EP-A-1 090 709) and D2 (DE-A-3 923 829), both of which are cited in the description, disclose a vacuum unit for abraded or decomposition products that form in a device for structuring a surface of a workpiece by means of laser radiation. D2 discloses, in addition, a hood having front edges of lateral walls, leading walls and a vacuum channel that has an inlet opening according to the present claim 1.

#### 1.2 Problem:

The problem addressed by the application is that of providing another vacuum unit of the known type which permits abraded and/or decomposition products that form during the engraving process to be reliably removed from the interaction zone between the laser beam and the workpiece, thereby practically entirely eliminating a build-up of

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

these products on the workpiece and/or the vacuum unit.

#### 1.3 Solution:

The specific combination of all the features according to claim 1, in particular, the specific embodiment of the hood having two lateral walls, leading walls extending transversally thereto and a leading wall that has a convex, cylindrical curvature and an opening for a machining beam according to the last paragraph of claim 1, is neither described by nor obvious from the prior art, and an inventive step within the meaning of PCT Article 33 is therefore involved.

#### 2. Claims 3 to 22:

Dependent claims 3 to 22 define advantageous embodiments of a vacuum unit, each of which includes all the features of claim 1.

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient. Continuation of:  $\overline{III}$ 

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

#### Clarity:

- The application fails to meet the requirements of PCT Article 6 because dependent claim 2 is not clear.
- The following feature of device claim 2 relates to a method of using the device and not to the definition of the device by means of its technical features:

"the front edges of the two lateral walls have a contour that is adapted to the contour of the surface of a workpiece to be machined".

A workpiece to be machined is not a component of the claimed vacuum unit and therefore cannot define a feature of the vacuum unit itself. The claimed limitations are therefore not clear from the present claim 2 (PCT Article 6).